

1. A database management system, comprising:

a processor associating lock durations with different activities in a transaction and maintaining locks for the duration of the activities and then releasing the locks when the activities are completed.

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2. A database management system according to claim 1 wherein one of the

activities includes a sort operation and the processor activates locks for each separate sort operation and releases the locks when the individual sort operations are completed.

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3. A database management system according to claim 1 including a memory

containing an activity bit map that tracks individual activities for the transaction, the processor assigning activity identifiers to the activities according to the activity bit map.

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4. A database management system according to claim 1 wherein the processor

associates the activities with lock modes and releases the lock modes on data items when the associated activities are finished.

5. A method for locking data items in a database management system,

comprising:

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associating lock durations with different activities in a transaction;

maintaining locks for the duration of the activities; and

releasing the locks when the activities are completed.

5           6.       A method according to claim 5 including:  
identifying different sort activities for the same transaction;  
activating locks on data items associated with the sort activities; and  
releasing the locks on the data items when the associated sort activities are completed.

10          7.       A method according to claim 5 including:  
maintaining an activity bit map that tracks individual activities for the transaction; and  
assigning activity identifiers to the activities according to the activity bit map.

            8.       A method according to claim 1 including associating the activities with lock  
15   modes and releasing the lock modes on data items when the associated activities are finished.